

## REMARKS

Claims 1-9 were previously pending in this application.

Claims 4-8 stand withdrawn as non-elected and are hereby cancelled without prejudice for presentation in a divisional application.

Claims 1 and 2 are rejected under 35 USC §103(a) as being unpatentable over Draexler (U.S. Patent No. 4,551,392) in view of Hoover (U.S. Patent No. 2,656,292).

Claims 3 and 9 are rejected under 35 USC §103(a) as being unpatentable over Draexler (U.S. Patent No. 4,551,392) in view of Hoover (U.S. Patent No. 2,656,292) as applied above in paragraph 6, and further in view of Nottebohm (U.S. Patent No. 2,080,730).

Claims 1 and 2 are amended.

New claims 10-11 are added.

No new matter is added.

With entry of this amendment, claims 1-3 and 9-11 remain in the case for reconsideration.

Reconsideration is respectfully requested.

## Claim objections

As suggested by the Examiner, claim 1 is amended to recite "at least." Further, claim 2 is amended to replace "phenyllenediamin" with --phenylenediamine--. Furthermore, claim 2 is amended to replace "styremeated" with --styrenated-- to correct typographical errors. Thus, the objections are overcome.

## Claim Rejections 35 USC §103(a)

Claims 1 and 2 are rejected under 35 USC §103(a) as being unpatentable over Draexler (U.S. Patent No. 4,551,392) in view of Hoover (U.S. Patent No. 2,656,292).

Claims 3 and 9 are rejected under 35 USC §103(a) as being unpatentable over Draexler (U.S. Patent No. 4,551,392) in view of Hoover (U.S. Patent No. 2,656,292) as applied above in paragraph 6, and further in view of Nottebohm (U.S. Patent No. 2,080,730).

The rejection is respectfully traversed.

Claim 1 is amended to recite, "the age resister includes at least one selected from the group consisting of phenylisopropyl-p-phenylenediamine and styrenated phenol."

In contrast, Draexler does not teach or disclose age retarders including phenylisopropyl-p-phenylenediamine or styrenated phenol.

Thus, the cited references, either alone or in combination, do not teach or suggest all of the limitations of claim 1. Accordingly, the rejection does not present a *prima facie* case of obviousness. Thus, the rejection of claim 1 under 35 U.S.C 103 is overcome. Therefore, claim 1 is allowable and claims 2-3 and 9-11, which depend therefrom and recite features that are neither taught nor disclosed in the cited references, are also allowable.

For the foregoing reasons, reconsideration and allowance of claims 1-3 and 9-11 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.



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PATENT TRADEMARK OFFICE

Respectfully submitted,

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Limited Recognition Under 37 CFR § 10.9(b)

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**VERSION WITH MARKINGS TO SHOW CHANGES MADE**

**In the Specification**

**Page 3, starting at line 31, and ending at line 34:**

The age resister includes at least one selected from a group consisting of [phenylisopropyl-p-phenylenediamin] phenylisopropyl-p-phenylenediamine, polymerized trimethyl dihydroquinoline, and [styremeated phenol] styrenated phenol. The adhesion-providing agent includes at least one of tragacanth rubber and polyvinyl poval (PVA) that is affined with water.

**Page 6, starting at line 3, and ending at line 14:**

The unvulcanized adhesive rubber sheet is used for unexposure. Durability of the sheet is over the warranty (five years). In order to maintain a waterproof function for a long time, it is required to add a special age resister to the sheet. Therefore, the present invention uses age resisters, "3C" [(Phenylisopropyl-p-phenylenediamin)] (phenylisopropyl-p-phenylenediamine), "RD" (Polymerized trimethyl dihydroquinoline), and "SP" (Styrenated phenol). The "3C" is good for heat resistance, flexure-crack resistance, oxidation resistance, and ozone resistance. The "RD" is good for heat resistance and oxidation resistance. And, the "SP" is good for flexure resistance, oxidation resistance, and ozone resistance. Adding such age resisters to the sheet, the sheet maintains an initial state for a long time. When the sheet attaching to a wall of a rooftop is left for two years (two summers and winters), cracks or rips are not created on a surface of the sheet. In case of an unexposure construction, the sheet exerts an excellent waterproof function for a long time.

**Page 7, starting at line 27 of Table, and ending at page 8, line 19 of Table:**

Rubber Main Material	One of Natural rubber and Synthetic rubber (SBR rubber, 1R rubber, EPT rubber, 2R rubber, CR rubber, NBR rubber, Urethane rubber, and CPE rubber) or Combination thereof	100%
Vulcanizing Compound Agent	Stealic Acid	1%
	Magnesium Oxide	5%
	Zinc Oxide	5%
	Sulfur	2%

Age Resister	Age Resister 3C [(Phenylisopropyl-p-phenylenediamin)] <u>(Phenylisopropyl-p-phenylenediamine)</u>	2%
	Age Resister RD (Polymerized trimethyl dihydroquinoline)	1.5%
	Age Resister SP [(Styremeated phenol)] <u>(Styrenated phenol)</u>	2%
Adhesion-providing Agent	Polybutene	6%
	Phenol-Formaldehyde-Resin	8%
	Petroleum Resin	10%
	PVA (Polyvinyl poval)	12%
	Tragacanth Gum	5%
Softener	Process Oil	14%
Filler	Calcium Carbonate	40%
	Clay	15%
Vulcanizing Agent	DM	1.6%
	D	1%
	T/T	1%
	NA22	1%

### In the Claims

1. (Once amended) A method of manufacturing an unvulcanized adhesive waterproof sheet, the method comprising [the steps of]:

agitating a rubber main material composed of at least one of a natural rubber and a synthetic rubber with a vulcanizing compound agent, an age resister, an adhesion-providing agent, a softener, and a filler, and [then] adding and agitating a vulcanizing agent thereto in an open roller, thereby producing a raw rubber material;

rolling and forcing out the raw rubber material [with constant width and thickness], thereby manufacturing a waterproof sheet; and

[making] attaching a releasing paper [attach] to both surfaces of the waterproof sheet [being cut with a constant length.],

wherein the age resister includes at least one selected from the group consisting of phenylisopropyl-p-phenylenediamine and styrenated phenol.

2. (Once amended) The method of Claim 1, wherein the age resister further includes [at least one selected from the group consisting of phenylisopropyl-p-phenylenediamine,] polymerized trimethyl dihydroquinoline [and styrenated phenol].

10. New

11. New